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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,600	10/12/2001	Rema Vaidyanathan	UTL 00038	3296

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Kyocera Wireless Corp.  
Attn: Patent Department  
PO Box 928289  
San Diego, CA 92192-8289

EXAMINER

HARVEY, DIONNE

ART UNIT PAPER NUMBER

2646

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/976,600

**Applicant(s)**

VAIDYANATHAN ET AL.

**Examiner**

Dionne N. Harvey

**Art Unit**

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE    MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-15 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s)        is/are allowed.
- 6) ☒ Claim(s) 4-15 and 20-29 is/are rejected.
- 7) ☐ Claim(s)        is/are objected to.
- 8) ☐ Claim(s)        are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on        is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No.       .
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>      </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>      </u> | 6) <input type="checkbox"/> Other: <u>      </u>  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claims 4, 14, 15, 20 and 29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, Lines 7 and 8 both recite "a subsequent initial". This is indefinite since by definition, a "subsequent" occurrence follows an "initial" occurrence.

Regarding claim 14, Lines 10 and 11 recite "a second initial" and "second compensated initial", respectively. This is indefinite since by definition, a "second" occurrence follows an "initial" occurrence.

Regarding claim 15, Line 16 recites "a subsequent initial". This is indefinite since by definition, a "subsequent" occurrence follows an "initial" occurrence.

Regarding claim 20, Line 21 recites "a compensated initial". This is indefinite since the "compensated initial" value of the claim, follows and differs from the "initial" value. Amendment to replace "compensated initial" with "compensated", or some similar recitation, is required.

Regarding claim 29, Lines 26-27 recite "a subsequent initial". This is indefinite since by definition, a "subsequent" occurrence follows an "initial" occurrence.

*Note: the U.S.C. 112, second paragraph rejection also applies to all claims dependent upon the above rejected claims.*

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claim 20 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in page 6 of the specification. In that portion of the specification, applicant has does not state that the compensator accepts the adjusted transmit bias control value, but rather discloses that the transmitter 202 accepts the adjusted transmit bias control value. This statement indicates that the invention is different from what is defined in the claim.

3. Claim 20 recites the limitation "the transmitter output measurement" in line 8. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **4-15 and 20-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Figure 1 of the Applicant's Admitted Prior Art**, in view of **Miyake (US 5,732,334)**.

Regarding claims 4 and 11, and as *best understood with regard to the U.S.C. 112 second paragraph rejections above*, **Figure 1 of the Applicant's Admitted Prior Art**, hereafter referred to as "APA", teaches a method for controlling transmitter output levels in a wireless communication device comprising: maintaining a table of initial transmit bias control values cross-referenced to transmitter output levels; as illustrated in **figure 1**, the output of transmitter circuitry reads on "generating an initial transmitter output level in response to supplying an initial transmit bias control value"; the output of measuring circuit of **figure 1** reads on "measuring the transmitter output level"; the Applicant's discussion of the APA, in **page 1, lines 26- page 2, line 5** of the specification, teaches that the difference between the transmitter output and reference value is calculated, any error value inherently translating to an error in the transmit bias control value currently in use; Also found in **page 1, lines 26- page 2, line 5**, of the specification, **figure 1** of the APA teaches that the calculated error is used in the OP-Amp's adjustment of the subsequent bias control value, reading on "using the error to compensate a subsequent initial transmit bias control value"; **page 1, lines 24-26** describes the OP-Amp as being part of a loop filter, thereby anticipating the limitation that the transmit bias control value is adjusted until the transmitter output level equals a selected transmitter output level.

**Figure 1** of the APA, does not clearly teach the following: selecting an [initial] transmitter output level; supplying a corresponding initial transmit bias control value, from a table, in correspondence to the selected transmitter output level; AND using the

determined error to compensate a subsequent initial transmit bias control value adding the error to the initial transmit bias control value.

**Column 9, lines 45-column 10, line 17, of Miyake** teaches a method of controlling a transmitter in a radio transmitter, wherein when the radio transmitter is started, a memory table is referenced so as to access a combination of parameters, and reference control data etc., reading on "initial transmit bias control value", so as to adjust the radio transmitter level according to the value of the control signal obtained from the memory table, thus reading on "selecting a transmitter output level [and] supplying an initial corresponding transmit bias control value in response to the selecting transmitter output level...", as claimed.

Furthermore, **in column 8, lines 4-17, Miyake** teaches that the error data, which reads on "determining an error in a transmit bias control value", is used to provide correction data, such that the correction data is added to the reference control data (which reads on "initial transmit bias control value") so as to generate the new control data (*said new control data reading on the "subsequent initial transmit bias control value"*).

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the Prior Art, per the teachings of Miyake, thereby providing a radio transmitter having circuitry for setting the magnitude of an RF frequency output signal to a predetermined value (see **column 1, lines 8-13 of the Miyake reference**).

Regarding claim 5, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, **column 4, lines 12-21** of Miyake appears to teach a method comprising supplying transmit bias control values in response to temperature.

Regarding claim 6, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, **figure 1 of the APA** appears to teach that supplying a corresponding initial transmit bias control value from the table (shown in **figure 1**) in response to the transmitter output frequency, as measured by the measuring circuit.

Regarding claim 7, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, in **column 18, lines 12-17**, Miyake appears to teach selecting transmitter output levels in accordance with AMPS.

Regarding claim 8, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the combination of the APA and Miyake appears to teach achieving the selected output level within 20 milliseconds.

Regarding claim 9, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, via analog to digital converter **17**, Miyake appears to teach converting the output voltage to a binary number.

Regarding claim 10, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, Miyake appears to teach storing table values within the control unit (**18**) as binary numbers.

Regarding claim 12, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the combination of the APA and Miyake appears to teach

converting the adjusted bias control value to control voltage and using the control voltage to bias the transmitter.

Regarding claim 13, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the combination of the APA and Miyake appears to teach comparing the initial bias control value to the adjusted bias control value thereby creating an error value; saving the error value; and compensating subsequent bias control value using the error value.

Regarding claim 14, *as best understood with regard to the U.S.C. 112, second paragraph rejections above, and as set forth in the rejection of claim 4, above*, the APA teaches operating at a first transmitter output level; determining a first error value in the initial bias control value; and selecting the subsequent bias control value so as to achieve the reference output level, said reference output level reading on “a second transmitter output level”. While Miyake teaches saving the first error value, as broadly claimed, so as to select a new bias control value; and adding the error value to the initial control value to create a new control value.

Regarding claim 15, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the limitations of claim 15 are rejected for the same reasons set forth in the rejections of claims 4 and 14, above.

Regarding claim 20, *and as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the APA teaches the transmitter, as claimed; additionally, page 1 of the applicant's specification teaches that **figure 1** of the APA illustrates an AGC loop, reading on “a gain control circuit” as claimed; **figure 1** of the



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APA also teaches a “measuring circuit” as claimed; as well as “a table of initial transmit bias control values”; while the functions of the OP-Amp in **figure 1** of the APA reads on “a compensator” as claimed. In **column 9 lines 45 – column 10, line 17**, Miyake teaches a start-up protocol having parameters, which reads on “the table of initial transmit bias control values configures to accept a selected transmitter output level and to supply an initial transmit bias control value in response to the transmitter output level selections”.

Regarding claim 21, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, in **column 12, lines 30-35**, Miyake appears to teach a thermometer having an output for supplying temperature data.

Regarding claim 22, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, **column 4, lines 12-21** of Miyake appears to teach a method comprising supplying transmit bias control values in response to temperature.

Regarding claim 23, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, Miyake teaches that the wireless device **100** operates in analog mode, and in **column 18, lines 12-17**, Miyake further teaches selecting transmitter output levels in accordance with AMPS.

Regarding claim 24, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the combination of the APA and Miyake appears to teach achieving the selected output level within 20 milliseconds.

Regarding claim 25, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, via analog to digital converter 17, Miyake appears to teach converting the output voltage to a binary number.

Regarding claim 26, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, Miyake appears to teach storing table values within the control unit (18) as binary numbers.

Regarding claim 27, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, in APA **figure 1**, the comparing and adjusting functions of the OP-Amp element appears to read on the “calculator” and “converter”, as claimed.

Regarding claim 28, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the combined teachings of the APA and the Miyake reference, appears to teach the error circuit; memory circuit; and summing circuit, as claimed.

Regarding claim 29, *as best understood with regard to the U.S.C. 112, second paragraph rejections above*, the limitations of claim 29 are rejected for the same reasons set forth in the rejections of claims 4, 14, 20, 27 and 28, above.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3 and 16-19 have been considered but are moot in view of the new ground(s) of rejection.

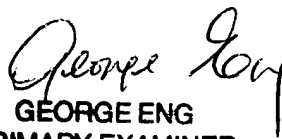
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N. Harvey whose telephone number is 571-272-7497. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
D. Harvey

  
GEORGE ENG  
PRIMARY EXAMINER